

Abstract

A magnetically driven pump includes a casing, a containment shell fixed to the casing, a shaft fixed at a closed end of the containment shell, an impeller rotatable about the shaft within the casing and containment shell, and a magnetic coupling
5 removably secured to the impeller and rotatable about the shaft. The pump also includes a rear bearing positioned between the propeller and the shaft that is rotatable about the shaft, and a thrust control valve that includes a thrust ring positioned between the containment shell and the rear bearing. An opening of the thrust control valve is defined by a variable spacing between the thrust ring and the rear bearing.

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